	Application No.	Applicant(s)
Notice of Allowability	09/746,201	BAZERMAN ET AL.
	Examiner	Art Unit
	Steven P Sax	2174
The MAILING DATE of this communication ap All claims being allowable, PROSECUTION ON THE MERITS herewith (or previously mailed), a Notice of Allowance (PTOL-8 NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT of the Office or upon petition by the applicant. See 37 CFR 1.3	IS (OR REMAINS) CLOSED in 35) or other appropriate communication is second RIGHTS. This application is second control in 85.	this application. If not included unication will be mailed in due course. THIS
1. This communication is responsive to Examiner's Amend	<u>lment 10/15/04</u> .	
2. X The allowed claim(s) is/are <u>1,3-9,11-18 and 20-27</u> .		
3. \boxtimes The drawings filed on <u>26 January 2000</u> are accepted by	the Examiner.	
4. Acknowledgment is made of a claim for foreign priority a) All b) Some* c) None of the: 1. Certified copies of the priority documents hat 2. Certified copies of the priority documents hat 3. Copies of the certified copies of the priority International Bureau (PCT Rule 17.2(a)). * Certified copies not received:	ave been received. ave been received in Applicatio	n No
Applicant has THREE MONTHS FROM THE "MAILING DATI noted below. Failure to timely comply will result in ABANDOI THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		a reply complying with the requirements
5. A SUBSTITUTE OATH OR DECLARATION must be sull INFORMAL PATENT APPLICATION (PTO-152) which g		
6. CORRECTED DRAWINGS (as "replacement sheets") m (a) including changes required by the Notice of Draftsport 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examinary Paper No./Mail Date Identifying indicia such as the application number (see 37 CFF) each sheet. Replacement sheet(s) should be labeled as such in	erson's Patent Drawing Reviev er's Amendment / Comment or R 1.84(c)) should be written on the	in the Office action of ne drawings in the front (not the back) of
7. DEPOSIT OF and/or INFORMATION about the de attached Examiner's comment regarding REQUIREMEN		
Attachment(s) 1. ☑ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SI Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	3) 6. ⊠ Interview St Paper No./ B/08), 7. ⊠ Examiner's it 8. ⊠ Examiner's 9. □ Other	formal Patent Application (PTO-152) ummary (PTO-413), Mail Date <u>10/15/04</u> . Amendment/Comment Statement of Reasons for Allowance

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DETAILED ACTION

1. This application has been examined.

2. An examiner's amendment to the record appears below. This was done to bring out in independent claims 1, 18, 25, 26 that the line representing the connection partially covers the line representing the link, thus clarifying the issue of vagueness regarding the recitation of "not completely cover," as well as bring out in independent claim 9 how the solid line representing the connection is overlaid onto the thick solid or thin broken lines representing the links, to show the connection on the link. Accordingly, claims 2, 10, and 19 are cancelled. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Please amend the claims as below:

 (currently amended) A method for representing network link and connection information in a graphical user interface suitable for network management, comprising:

receiving information about network link state and connection status within a network; and

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operating an output device to:

represent each link in a first state as a line having a first visual characteristic;

represent each link in a second state that is different from said first state as a line having a second visual characteristic, different from said first visual characteristic; and

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represent a connection on a given network link as a line having a third visual characteristic, different from said first and second visual characteristics, such that, when said given network link is in said first state, said line representing said connection completely covers said line representing said given network link and, when said given network link is in said second state, said line representing said connection does not completely cover partially covers said line representing said given network link.

2. (canceled)

- 3. (original) The method of claim 1, wherein, when said given network link is in said second state, said line representing said connection partially covers said line representing said given network link such that a margin of said line representing said given network link is visible.
- 4. (original) The method of claim 1, wherein said first state is out-of-service and said second state is in-service.
- 5. (original) The method of claim 1, wherein said line having said first visual characteristic is a thin and broken line and said line having said second visual characteristic is thicker than said line having said first visual characteristic.

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6. (original) The method of claim 5, wherein said line having said third visual characteristic is a thin and solid line that is at least the same thickness as said line having said first visual characteristic and less thick than said line having said second visual characteristic.

- 7. (original) The method of claim 5, wherein said line having said third visual characteristic further includes a pattern that is different from said line having said first visual characteristic and said line having said second visual characteristic.
- 8. (original) The method of claim 1, wherein each of said line having said first visual characteristic, said line having said second visual characteristic, and said line having said third visual characteristic is a different color from the others.
- 9. (currently amended) A method for representing network link and connection information in a network management graphical user interface comprising:

receiving information about link state and connection status within a network; and operating an output device to:

represent out-of-service links with a thin broken line;

represent in-service links with a thick solid line, thicker than said thin broken line; and

represent connections on a given link as a thin solid line that is at least as thick as said thin broken line and thinner than said thick solid line, wherein said thin solid line is overlayed on said thick solid line or said thin broken line to represent a connection on a given link.

10. (canceled)

11. (currently amended) The method of claim [[10] 9, wherein said thin solid line obscures said thin broken line when overlayed thereon.

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12. (original) The method of claim 9, wherein said thin broken line is a dashed line.

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- 13. (original) The method of claim 9, wherein each of said thin broken line, said thick solid line and said thin solid line is a different color from the others.
- 14. (original) The method of claim 9, wherein each of said thin broken line, said thick solid line and said thin solid line is a different pattern from the others.
- 15. (original) The method of claim 13, wherein said thick solid line is green in color.
- 16. (original) The method of claim 13, wherein said thin solid line is yellow in color.
- 17. (original) The method of claim 13, wherein said thin broken line is red in color.
- 18. (currently amended) A computer readable medium containing computer executable code for adapting a computer input with network link and connection information to:
 - output each link in a first state as a line having a first visual characteristic; output each link in a second state that is different from said first state as a line having a second visual characteristic, different from said first visual characteristic; and
 - output a connection on a given network link as a line having a third visual characteristic, different from said first and second visual characteristics, such that, when said given network link is in said first state, said line representing said connection completely covers said line representing said given network link and, when said given network link is in said second state, said line representing said connection does not completely cover partially covers said line representing said given network link.

19. (canceled)

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20 (original) The computer readable medium of claim 18, wherein, when said given network link is in said second state, said line representing said connection partially covers said line representing said given network link such that a margin of said line representing said given network link is visible.

- 21. (original) The computer readable medium of claim 18, wherein said first state is outof-service and said second state is in-service.
- 22. (original) The computer readable medium of claim 18, wherein each of said line having said first visual characteristic and said line having said third visual characteristic is a different pattern from the other.
- 23. (original) The computer readable medium of claim 18, wherein each of said line having said second visual characteristic and said line having said third visual characteristic is a different pattern from the other.
- 24 (original) The computer readable medium of claim 18, wherein each of said line having said first visual characteristic, said line having said second visual characteristic, and said line having said third visual characteristic is a different color from the others.
- 25. (currently amended) A network management tool comprising:

means for receiving information about network link state and connection status within a network:

an output device; and

means for operating said output device to:

represent each link in a first state as a line having a first visual characteristic;

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represent each link in a second state that is different from said first state as a line having a second visual characteristic, different from said first visual characteristic; and

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represent a connection on a given network link as a line having a third visual characteristic, different from said first and second visual characteristics, such that, when said given network link is in said first state, said line representing said connection completely covers said line representing said given network link and, when said given network link is in said second state, said line representing said connection does not completely cover partially covers said line representing said given network link.

26. (currently amended) A graphical user interface for displaying network link and connection information, said graphical user interface displaying:

each network link in a first state as a line having a first visual characteristic;

each network link in a second state that is different from said first state as a line having a second visual characteristic, different from said first visual characteristic; and

a connection on a given network link as a line having a third visual characteristic, different from said first and second visual characteristics, such that, when said given network link is in said first state, said line representing said connection completely covers said line representing said given network link and, when said given network link is in said second state, said line representing said connection does not completely cover partially covers said line representing said given network link.

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- 27 (original) The graphical user interface of claim 26, wherein said display of said connections is independent of said display of said network links.
- 3. Authorization for this examiner's amendment was given in a telephone interview with Mr. Ron Faggetter on 10/15/04.
- 4. The following is an examiner's statement of reasons for allowance: The Examiner's Amendment brings out the necessary limitations in the claims to distinguish over the art. An important distinction to note between the present invention and the prior art is that in the present invention, separate characteristic representation lines are used for the connection itself, as well as for the different links themselves. These representation lines then are superimposed, that is, the connection representation line is overlaid onto the link representation line, in a specific way depending on the current state or in/out service activity of the links. Either the link representation line is partially covered by the connection representation line to indicate in service status, or the link representation line itself changes and then in covered by a connection representation line of intermediate size between the in/out service link representation lines. The claims, in view of the Examiner's Amendment, are not set forth in the prior art of record.

Independent claims: 1 currently amended, the method of managing the network via the graphical user interface which represents the network links and connections as described above, which has the link representation line partially covered by the connection representation line in the active/in service state. 9 currently amended, the method of managing the network via the graphical user interface which represents the

the graphical user interface like claim 1 amended.

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network links and connections as described above, with out of service links specifically represented by thin broken lines, in service links by thick solid lines, connections on a given link by a thin solid line atleast as thick as the thin broken line and thinner than the thick solid line overlaying the thick solid or think broken link lines. 18 currently amended, the computer readable medium like claim 1 amended. 25 currently

amended, the network management tool like claim 1 amended. 26 currently amended,

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven P Sax whose telephone number is 703-305-9582. The examiner can normally be reached on M-F 8:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid can be reached on 703-308-0640. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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